

Print Server

PS159

Hardware Installation Guide

Overview

This Hardware Installation Guide provides a brief description of the hardware installation of the print server. It contains the following information:

- **Scope of Supply**
- **Safety Regulations**
- **Print Server Controls and Technical Data**
- **Mounting the Print Server**
- **Installation in a Wireless LAN**
- **Notification**

Information and Hotline

To obtain additional information about your print server, please refer to the documentation on the Product CD. Should you have any further questions, please contact our support hotline.

	Monday - Thursday	8:00 a.m. to 4:45 p.m. and
	Friday	8:00 a.m. to 3:15 p.m. (CET)
	+49 (0)521 94226-44	
@	support@seh.de	

Scope of Supply

Please check the package content before getting started:

	Print Server	PS159 + WLAN USB Stick + USB Cable
	Hardware Installation Guide	Provides a brief description of the hardware installation of the print server. (This document)
	Quick Installation Guide	Provides information about a fast operational readiness of the print server.
	Product CD	The Product CD provides: - User Manual (The pdf file provides a detailed description of the installation and administration.) - Installation Manuals (The pdf files provide a detailed description of the software installation under each of the supported operating systems.) - InterCon-NetTool (Administration tool), - SEH Printer Wizard (Printer Installation Wizard), - SEH Print Monitor, - SEH Private-MIB, - Adobe Reader

Safety Regulations

English [en]

Print servers are network interfaces for printers in office environments and are designed for the direct integration of printers into networks. Before starting the initial operation procedure of your device, please note the following safety regulations:

- Read the documentation and make sure that your system meets the requirements listed therein.
- Avoid contact with humidity or liquids.
- The device must only be connected and operated if it is in perfect condition.
- Before unpacking the device, take all necessary precautions to avoid damage to the device board e.g. electrostatic discharges etc.
- The device is intended for installation within the printer and must not be used externally.
- Observe the national restrictions which apply for the use of WLAN print devices. For more information, consult your retailer.

Deutsch [de]

Printserver sind Netzwerkschnittstellen für Drucker in Büroumgebungen und dienen zum direkten Einbinden von Druckern in Netzwerken. Beachten Sie vor Inbetriebnahme Ihres Gerätes folgende Sicherheitsvorschriften:

- Lesen Sie die Dokumentation und stellen Sie sicher, dass Ihr System den aufgeführten Anforderungen entspricht.
- Das Gerät darf nicht mit Feuchtigkeit oder Flüssigkeit in Berührung kommen.
- Das Gerät darf nur in unversehrtem Zustand angeschlossen und betrieben werden.
- Treffen Sie vor dem Auspacken geeignete Maßnahmen, um Beschädigungen durch elektrostatische Entladung zu vermeiden.
- Das Gerät darf nicht außerhalb des Druckers betrieben werden.
- Beachten Sie nationale Einschränkungen beim Betrieb des WLAN-Gerätes. Fragen Sie hierzu Ihren Fachhändler.

Français [fr]

Les serveurs d'impression sont des interfaces réseaux pour les imprimantes dans des bureaux et servent à l'intégration directe des imprimantes dans les réseaux. Avant de mettre en service votre périphérique, veuillez suivre ces quelques conseils de sécurité:

- Lisez attentivement la documentation et assurez-vous que votre système satisfait bien toutes les exigences mentionnées.
- Evitez le contact avec l'humidité ou avec le liquide.
- Le périphérique doit être connecté et exploité uniquement en parfait état de fonctionnement.

- Prenez des mesures de précaution avant le déballage afin d'éviter toute détérioration du périphérique suite à des décharges électrostatiques.
- Le périphérique ne doit pas être utilisé à l'extérieur de l'imprimante.
- Veuillez lire et respecter les restrictions nationales concernant l'utilisation des périphériques WLAN. Contacter à ce propos votre commerçant spécialisé.

Español [es]

Los servidores de impresión son interfaces de la red para impresoras en oficinas y sirven para la integración directa de impresoras en redes. Tenga en cuenta antes de poner en funcionamiento su dispositivo las siguientes precauciones:

- Lea la documentación y compruebe que su sistema reune los requisitos necesarios.
- Evite el contacto con la humedad o con el líquido.
- El dispositivo sólo debe ser conectado y accionado en un estado intacto.
- Antes de desempaquetar el dispositivo tome las precauciones necesarias para evitar daños producidos por descargas electrostáticas.
- El uso del dispositivo está prohibido fuera de impresora.
- Lea y tenga en cuenta las restricciones nacionales con respecto al uso de los dispositivos WLAN. Para más informaciones, consulte su comerciante especializado.

Italiano [it]

I server di stampa sono interfacce della rete per le stampanti negli ambienti dell'ufficio e servono all'integrazione diretta delle stampanti nelle reti. Prima di mettere in esercizio il dispositivo, osservare le istruzioni di sicurezza descritte qui di seguito:

- Leggere la documentazione ed assicurarsi che il proprio sistema sia conforme ai requisiti riportati.
- Evitare il contatto con l'umidità e con il liquido.
- Il dispositivo deve essere collegato e messo in funzione solo in condizioni perfette.
- Prima di procedere all'estrazione della scheda dalla confezione devono essere adottate misure idonee per evitare danneggiamenti del dispositivo a causa di scariche elettrostatiche.
- L'uso del dispositivo è vietato fuori della stampante.
- Leggere e osservare le limitazioni nazionali per l'uso dei dispositivi WLAN. Rivolgersi ad un commerciante specializzato.

Português [pt]

Servidores de impressão são interfaces de rede para impressoras em ambientes empresariais e destinam-se à integração directa das impressoras dentro das redes. Antes de colocar o seu dispositivo em funcionamento, observe os seguintes avisos de segurança:

- Leia a documentação e certifique-se de que o seu sistema corresponde aos requisitos indicados.

- O dispositivo não pode entrar em contacto com humidade ou líquidos.
- O dispositivo apenas deve ser ligado e operado se estiver em perfeitas condições.
- Antes de desembalar os componentes, deve tomar as medidas adequadas para evitar danos por descargas electrostáticas.
- O dispositivo não deve ser operado fora da impressora.
- Observe as restrições nacionais ao utilizar os dispositivos WLAN. Para o efeito, consulte o seu revendedor especializado.

Svenska [sv]

En printserver är ett nätverksinterface för skrivare i kontor och används för den direkta integreringen av skrivare i nätverk. Beakta följande säkerhetsanvisningar före idrifttagandet av apparaten:

- Läs dokumentation och säkerställ att ditt system motsvarar de uppförda kraven.
- Apparaten får ej utsättas för fukt eller vätskor.
- Apparaten får endast anslutas och tas i drift i felfritt tillstånd.
- Genomför före uppackningen lämpade åtgärder för att undvika skador orsakade av elektrostatiska urladdningar.
- Apparaten får ej bedrivas utanför skrivaren.
- Iakta nationella inskränkningar rörande drift av WLAN-apparat. Fråga din lokala fackhandel om du är osäker.

Dansk [da]

Printservere er netværksgrænseflader til printere i kontormiljøer og bruges til at integrere printere direkte i netværk. Inden De tager Deres apparatet i brug, skal De være opmærksom på følgende sikkerhedsforskrifter:

- Læs det tilhørende skriftlige materiale, og kontroller, at Deres system opfylder de angivne krav.
- Produktet må ikke komme i kontakt med fugt eller væske.
- Apparatet skal være fuldstændig intakt og uden skader, når den tilsluttes og under anvendelse.
- Før De pakker produktet ud, skal De træffe de nødvendige foranstaltninger for at undgå beskadigelse gennem elektrostatisk afladning.
- Apparatet må ikke drives udenfor printeren.
- Vær opmærksom på nationale indskrænkelser ved driften af WLAN-apparatet. Spørg hertil din faghandler.

Suomi [fi]

Tulostinpalvelimet ovat tulostimille tarkoitettuja, toimistoympäristössä käytettäviä verkkoliittymiä, ja niiden käyttötarkoitus on liittää tulostimet tietoverkkoihin. Ennen laitteen käyttöönottoa tulee ottaa huomioon seuraavat turvamääräykset:

- Lue dokumentaatio ja varmista, että järjestelmäsi täyttää siinä esitetyt vaatimukset.
- Laitteeseen ei saa joutua kosteutta tai nesteitä.
- Laitetta ei saa liittää verkkoon tai käyttää, jos se on vahingoittunut.

- Huolehdi asianmukaisista toimista ennen kuin otat tuotteen pakkauksesta, jotta vältyttäisiin staattisen sähkön purkauksilta ja niiden aiheuttamilta vaurioilta.
- Laitetta saa käyttää vain yhdessä tulostimen kanssa.
- Noudata kansallisia määräyksiä WLAN-laitetta käyttäessäsi. Kysy lisää alan liikkeestä.

Nederlands [nl]

Printservers zijn netwerkinterfaces voor printers in kantooromgevingen en zijn bedoeld voor het direct invoegen van printers in netwerken. Voor de ingebruikname van de apparaat dienen de volgende veiligheidsvoorschriften in acht te worden genomen:

- Lees de documentatie en vergewist u zich er van dat uw systeem voldoet aan de vermelde vereisten.
- Het apparaat mag niet in aanraking komen met vochtigheid of met vloeistoffen.
- Het apparaat mag alleen in onbeschadigde toestand worden aangesloten en bedreven.
- Voor het uitpakken moeten maatregelen worden getroffen om te voorkomen dat het apparaat beschadigingen oploopt door elektrostatische ontlading.
- Het apparaat mag niet afzonderlijk van de printer worden gebruikt.
- Neem de nationale beperkingen bij het gebruik van de WLAN-apparaat in acht. Vraag uw vakhandel om informatie.

Ελληνικά [el]

Οι printserver είναι διεπαφές δικτύου για εκτυπωτές σε χώρους γραφείου και εξυπηρετούν την απευθείας σύνδεση εκτυπωτών σε δίκτυα. Πριν τη θέση σε λειτουργία της συσκευής σας λάβετε υπόψη σας τις ακόλουθες οδηγίες ασφαλείας:

- Διαβάστε το εγχειρίδιο και βεβαιωθείτε ότι το σύστημά σας ανταποκρίνεται στις απαιτήσεις που αναφέρονται στο εγχειρίδιο λειτουργίας.
- Η συσκευή δεν επιτρέπεται να έρθει σε επαφή με υγρασία ή με οποιοδήποτε υγρό.
- Η συσκευή επιτρέπεται να συνδέεται και να χρησιμοποιείται μόνο εφόσον βρίσκεται σε άρτια κατάσταση.
- Πριν το βγάλετε από τη συσκευασία λάβετε τα απαραίτητα μέτρα, ώστε νααποφύγετε τυχόν φθορές από ηλεκτροστατική εκφόρτιση.
- Δεν επιτρέπεται η χρήση του διακομιστή εκτύπωσης χωρίς τον εκτυπωτή.
- Τηρείτε τους εθνικούς περιορισμούς κατά τη χρήση της συσκευής WLAN.   Για περισσότερες πληροφορίες απευθυνθείτε στον αντιπρόσωπο.

Slovenčina [sk]

Printservery sú sietovými užívateľskými rozhraniami pre tlačiarne do kancelárskeho prostredia a slúžia na priame pripojenie tlačiarní k sieti. Pred uvedením Vášho zariadenia tlačového servera do prevádzky zohladnite nasledovné bezpečnostné predpisy:

- Preèítajte si dokumentaèný materiál a uistite sa, že Váš systém vyhovuje uvádzaným požiadavkám.
- Prístroj nesmie príst do kontaktu s vlhkostou alebo s kvapalinami.

- Zariadenie tlaèového servera smie byt' zapojené a prevádzkované len v nepoškodenom stave.
- Pred vybalením urobte opatrenia, aby sa predišlo poškodeniu elektrostatickými výbojmi.
- Zariadenie tlaèového servera sa nesmie prevádzkovat' mimo tlačiarne.
- Dodržujte národné obmedzenia pri prevádzke tlačového servera WLAN. Opýtajte sa na to Vášho odborného predajcu.

Eesti [et]

Printserverid on võrguliidesed bürooprinterite jaoks ning nende ülesandeks on printerite otsene ühendamine võrku. Lugege enne seadme kasutuselevõtmist läbi järgnevad ohutusjuhised:

- Lugege dokumentatsioon läbi ning kontrollige, kas Teie süsteem vastab loetletud nõuetele.
- Seade ei tohi kokku puutuda niiskuse ega vedelikega.
- Ühendada ja kasutada võib ainult vigastamata seadet.
- Võtke seadme lahtipakkimisel tarvitusele kohased ettevaatusabinõud, et vältida staatilisest elektrist tekkida võivaid kahjusid.
- Seadet ei tohi kasutada väljaspool printerit.
- Arvestage WLAN seadmetele kehtestatud kohalikke piiranguid. Sellekohast infot saate seadme müüjalt.

Lietuvių kalba [lt]

Printserveriai skirti tinklo sąsajos biuro spausdintuvams ir jie naudojami jungiant spausdintuvus į tinklą. Prieš pradėdami naudoti savo prietaisą atkreipkite dėmesį į šiuos nurodymus dėl saugos:

- Perskaitykite dokumentus ir įsitikinkite, ar jūsų sistema atitinka nurodytus reikalavimus.
- Prietaisui kenkia drėgmė ar skystis.
- Tik nepriekaištingos būklės priet aisą galima prijungti ir juo naudotis.
- Tińkamas imtis priemonių, apie sužalójimas dél elektrostatikas véngti.
- Prietaiso negalima eksploatuoti ne spausdintuvo viduje.
- Eksploatuodami savo WLAN prietaisą, laikykitės nacionalinių apribojimų. Informacijai gauti kreipkitės į pardavėją.

Latviešu valoda [lv]

Printera serveri ir tīkla saskarnes printeriem biroju apkārtnē un tie kalpo tiešai printeru ieslēgšanai tīklos. Pirms uzsākt iekārtas ekspluatāciju, lūdzam iepazīties ar sekojošiem drošības noteikumiem:

- Iepazīstieties ar dokumentāciju un pārliecinieties, ka Jūsu sistēma atbilst minētajām prasībām.

- Iekārta nedrīkst nonākt saskarē ar mitrumu vai šķidrumu.
- Iekārtu drīkst pieslēgt un ekspluatēt tikai nebojātā stāvoklī.
- Pirms izpakošanas, lūdzu, veikt attiecīgus pasākumus, lai novērstu bojājumus elektrostatiskās izlādēšanās rezultātā.
- Iekārtu nedrīkst izmantot citādi kā tikai printeriem.
- Izmantojot WLAN-iekārtu, jāņem vērā attiecīgajā valstī spēkā esošie ierobežojumi. Lūdzu, griezties ar jautājumiem specializētā veikalā.

Slovenščina [sl]

Tiskalniški strežniki so omrežni vmesniki za tiskalnik v uradih in služijo za neposredno povezavo tiskalnikov v omrežja. Pred zagonom svoje naprave upoštevajte naslednje varnostne predpise:

- Preberite dokumentacijo in prepričajte se, da vaš sistem ustreza navedenim zahtevam.
- Stroj ne sme priti v stik z vlago ali tekočino.
- Naprava se sme priključevati in poganjati samo v nepoškodovanem stanju.
- Pred jemanjem iz embalaže opravite vse primerne ukrepe, da se izognete poškodbam zaradi elektrostatičnega praznjenja.
- Naprave se ne sme poganjati zunaj tiskalnika.
- Upoštevajte nacionalne omejitve pri uporabi WLAN-naprava. O tem vprašajte svojega prodajalca.

Polski [pl]

Serwery druku stanowią interfejsy sieciowe dla drukarek w otoczeniach biurowych i służą do bezpośredniego integrowania drukarek w sieci. Przed uruchomieniem urzadzenie należy przestrzegać następujących przepisów bezpieczeństwa:

- Przeczytać dokumentację i upewnić się, że posiadany system spełnia podane tam wymagania.
- Urządzenie nie może mieć kontaktu z wilgocią lub cieczami.
- Urządzenie może być podłączane i eksploatowane tylko w nieuszkodzonym stanie.
- Przez rozpakowaniem należy przedsięwziąć odpowiednie środki, aby uniknąć uszkodzeń spowodowanych wyładowaniami elektrostatycznymi.
- Urządzenie nie może być używany poza drukarką.
- Należy przestrzegać właściwych dla danego kraju ograniczeń używania urządzenie WLAN. Proszę o to zapytać swojego sprzedawcę.

Česky [cs]

Tiskové servery jsou sít'ová rozhraní pro tiskárny v kancelářském prostředí a slouží pro přímé sdílení tiskáren v sítích. Před uvedením tiskového serveru do provozu dodržujte následující bezpečnostní předpisy:

- Přečtěte si dokumentaci a zajistěte, aby Váš systém odpovídal uvedeným požadavkům.
- Přístroj nesmí přijít do styku s vlhkostí nebo tekutinou.
- Přístroj smí být instalován a provozován pouze v neporušeném stavu.

- Před vybalením proveďte náležitá opatření, aby nedošlo k poškození elektrostatickým výbojem.
- Přístroj je zakázáno provozovat mimo rámec tiskárny.
- Při provozu tiskového serveru WLAN dodržujte národní předpisy. Bližší informace o nich vám sdělí prodejce.

Magyar [hu]

A nyomtatószerverek hálozati interfészek irodahelyiségekben elhelyezett nyomtatók számára és feladatuk a nyomtatók közvetlen bekötése a hálozatokba.Vegye figyelembe az Ön nyomtatószerverének üzembevétele előtt a következő biztonsági előírásokat:

- Olvassa el a dokumentációt és biztosítsa, hogy az Ön rendszere megfeleljen a felsorolt követelményeknek.
- A készülék nem léphet érintkezésbe nedvességgel vagy folyadékkal.
- Csak sértetlen állapotban csatlakoztatható és üzemeltethető a készülék.
- Kérjük, hogy a kicsomagolás előtt gondoskodjon az elektrosztatikus kisülések megelozésérol.
- A készüléket nem szabad a nyomtatón kívül üzemeltetni.
- Kérjük, hogy a WLAN készülék használatakor tartsa be az országos korlátozásokat. Ezekről a nyomtatókiszolgáló viszonteladójától kérhető további felvilágosítás.

Malti [mt]

Il-print servers huma interfaces ta' netwerk ghall-printers f'uffiċċju u huma ddisinjati ghall-integrazzjoni diretta ta' printers ma' netwerks. Qabel ma tibda bil-proċedura inizjali ta' thaddim ta' l-apparat tieghek, jekk joghgbok hu nota tar-regolamenti ta' sigurtŕ li gejjin:

- Aqra d-dokumentazzjoni u aghmel ċert li s-sistema tieghek tissodisfa l-htigijiet elenkati fiha.
- Evita kuntatt ma' l-umditŕ jew ma' likwidi.
- L-apparat ghandu jigi mqabbad u mhaddem biss jekk ikun f'kundizzjoni perfetta.
- Qabel ma tnehhi t-tgeżwir ta’l-apparat, hu l-prekawzjonijiet kollha mehtiega sabiex tevita li taghmel hsara lill-bord ta’l-apparat eż. skariki elettrostatiċi eċċ.
- L-apparat huwa mahsub biex jigi installat fil-printer u m'ghandux jigi użat fuq barra.
- Hares ir-restrizzjonijiet nazzjonali li japplikaw ghall-użu ta' print servers WLAN. Ghal aktar informazzjoni, ikkonsulta lill-bejjiegh.

Български [bg]

Принтсървърите представляват интерфейс за принтери в офиси и служат за директна връзка на принтерите с мрежата. Преди пускане в експлоатация на уреда имайте предвид следните указания за безопасност:

- Прочетете документацията и се уверете, че Вашата система отговаря на изискванията.
- Уредът не бива да има съприкосновение с влага или с течности.
- Уредът може да се свърже и експлоатира само в безупречно състояние.
- Преди да разопаковате уреда, вземете подходящи мерки против повреди от електростатични разряди.

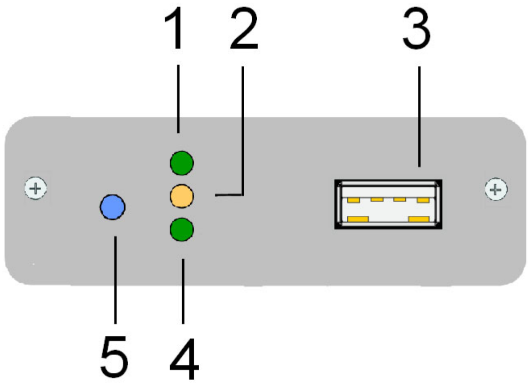
- Уредът не бива да се ползва извън принтера.
- При употреба на WLAN-уред имайте предвид националните ограничения. По този въпрос се обърнете към Вашия специализиран търговец.

Românã [ro]

Cu Printserver sunt denumite interfețele de rețea pentru imprimante de birou; aceste servere au rolul de integrare directă a imprimantelor în rețele. Înainte de punerea în funcțiune a aparatului dumneavoastră, aveți în vedere următoarele prescripții de siguranță:

- Citiți documentația şi asigurați-vă că sistemul dumneavoastră corespunde cerințelor enumerate.
- Aparatul nu are voie să vină în contract cu umiditate sau lichide.
- Aparatul se va conecta şi pune în funcțiune numai dacă este în stare intactă.
- Înainte de scoaterea din ambalaj, întreprindeți măsurile necesare pentru a evita deteriorarea prin descărcări electrostatice.
- Folosirea aparatului este interzisă în afara imprimantei.
- La utilizarea aparatelor WLAN, vă rugăm să respectați restricțiile în vigoare pe plan național. Solicitați informații în acest sens de la distribuitorul de specialitate.

Print Server Controls and Technical Data

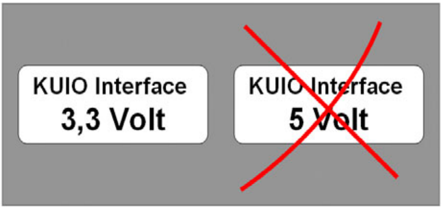


1) Power LED (green)
2) Network activity LED (yellow): The LED lights up when data packets are being received.
3) USB port WLAN Module
4) Status indicator LED (green): The LED shows that the print server is operational.
5) Status button

Characteristics	Values
Printer Connector	- Kyocera KUIO
Network Connection logical: physical:	 - IEEE 802.11g - WLAN Module (WLAN USB Stick)
Operating Environment	- Ambient temperature: 5 - 40 °C - Relative humidity: 20 - 80 %
Dimensions	- Length 160 mm - Width 95 mm - Height 30 mm - Weight 100 g (+ WLAN Module = 130g)

Mounting the Print Server

The print server is a so-called slot card that is simply inserted into the provided slot.



Use KUIO 3,3 Volt Interfaces ONLY!
For more information,
please consult your retailer.

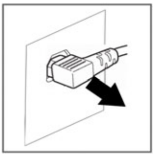
THE USE OF A 5 VOLT INTERFACE
WILL DAMAGE YOUR PRINT SERVER!



Prepare the Printer

Proceed as follows:

1. *Turn the printer off.*

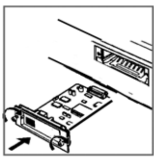


2. *Disconnect the printer's power cord.*



3. *Remove the screws from the interface cover.*
4. *Remove the metal cover.*

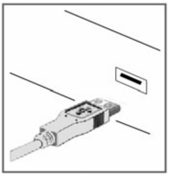
Insert the Print Server



Proceed as follows:

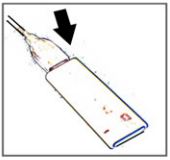
1. *Insert the print server board into the slot until the board locks into the receptacle.*
2. *Fasten the print server board screws.*

Connect the Print Server

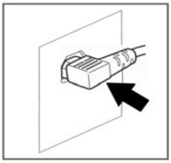


Proceed as follows:

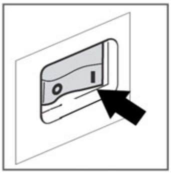
1. *Connect the USB cable to the print server.*
2. *Connect the USB cable to the WLAN USB stick.*



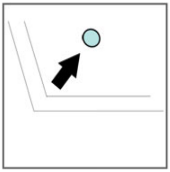
Only connect the WLAN USB stick to the print server using the USB cable included in the package in order to ensure a correct operation of the print server.



3. *Connect the printer's power cord to the printer.*



4. *Turn the printer on.*



5. *Press the status button of the print server in order to print out a status page.*

Attach the WLAN USB Stick (optional)

You can attach the WLAN USB stick (e.g. to the printer) using the enclosed hook and loop fasteners.

Proceed as follows:

1. *Put both halves of the hook and loop fastener together.*
2. *Stick the hook and loop fasteners to the WLAN USB stick.*
3. *Peel off the remaining protective film and attach the WLAN USB stick firmly to the printer. Make sure not to cover any ventilation slots or controls of the printer.*

🗎 Installation in a Wireless LAN

General Setup Information

Communication mode

By selecting the communication mode you define the type of network structure the print server is to be installed in. Two modes are available:

- In the 'Ad-Hoc' mode, the print server communicates directly with another WLAN Client (peer-to-peer).
- The 'Infrastructure' mode is suitable for setting up large wireless networks with several devices in different rooms. Communication between the devices is done via an access point which is connected to the network. The access point may be protected by encryption or authentication.

SSID (Service Set Identifier)

The SSID is a wireless network identifier. Each Wireless LAN has a configurable SSID serving to uniquely identify the wireless network. The SSID is defined at the access point of a Wireless LAN and needs to be adopted by all PCs and print servers that are meant to have access to the respective network.

Security Information

Make sure that no unauthorized user logs on to the Wireless LAN and that no one has access to the Internet or network resources.

Your print server offers several security mechanisms. The following table gives an overview of different encryption and authentication methods.

Standard	Mechanism	
	Encryption	Authentication
WEP	WEP (Open System / Shared Key)	---
WEP+EAP	WEP (Open System)	EAP (TLS / MD5 / LEAP / TTLS / PEAP / FAST)
WPA (Personal Mode)	TKIP/MIC	PSK
WPA2 (Personal Mode)	AES-CCMP	PSK
WPA (Enterprise Mode)	TKIP/MIC	EAP (TLS / MD5 / LEAP / TTLS / PEAP / FAST)
WPA2 (Enterprise Mode)	AES-CCMP	EAP (TLS / MD5 / LEAP / TTLS / PEAP / FAST)

WEP (Wired Equivalent Privacy)

WEP is an encryption method according to IEEE 802.11 on the basis of the RC4 encryption algorithm. WEP offers mechanisms for data encryption and authentication. WEP uses a key to encrypt the entire communication. For this purpose, a key is stored in each WLAN device. WEP offers three modes.

- 'Open System' for data encryption. The Wireless LAN is available for all clients. No authentication is carried out.
- 'Open System + EAP' for data encryption. In addition a version of the 'Extensible Authentication Protocol' is used for authentication purposes.
- 'Shared Key' for data encryption. In addition the Challenge-Response authentication mechanism is used with a secret key.

WPA / WPA2 (Wi-Fi Protected Access)

In contrast to WEP, WPA offers enhanced mechanisms for exchanging keys. The exchange key is only used at the beginning of a session. Afterwards a session key is used. The key is regenerated periodically. The WPA mechanism requires an authentication at the beginning of a connection.

- Personal Mode: Network authentication is done via the Pre-Shared-Key (PSK), a password with 8 to 63 alphanumeric characters.
- Enterprise Mode: Network authentication is done via an EAP authentication method.

An individual 128-bit key is used for data encryption after the authentication. The following encryption methods are available to encrypt your data.

- TKIP (Temporal Key Integrity Protocol) for WPA
- AES (Advanced Encryption Standard) for WPA2

EAP Authentication

You can check the identity of a device or user by means of an authentication method before they gain access to resources in the network. The print server offers different variants of EAP (Extensible Authentication Protocol) as authentication method.

For further information about authentication, see the 'User Manual'.

Installation

This guide describes the installation via the 'Wireless Wizard' that is included in the 'InterCon-NetTool'. The configuration via the 'Properties' dialog or the 'Print Server Homepage' is also possible.

Verify the following points before configuring the PS159:

- ✓ You have decided into which network the PS159 is to be integrated, and you know the current WLAN settings.
- ✓ The PS159 is connected to a printer, and to the mains.
- ✓ The InterCon-NetTool is installed on the PC.
  Refer to the User Manual if necessary.
- ✓ The PC is able to establish a wireless connection.

Proceed as follows:

1. *Adapt the WLAN settings of the PC to the current print server settings to communicate with the PS159. The PS159 ships with the following default settings.*

Mode: Ad-Hoc SSID: SEH Channel: 3	**The current print server settings can be seen at any time on the status page. To print a status page press the status button on the print server.**

2. *Start the InterCon-NetTool and find the PS159 in the print server list.*
   Refer to the 'InterCon-NetTool' section in the User Manual if necessary.
3. *Highlight the PS159 in the print server list and start the Wireless Wizard via the context menu.*
4. *Follow the instructions of the Wireless Wizard.*
   - Manually enter an IP address or select a method to automatically assign the IP address.
   - Optionally the Wireless Wizard asks for a temporary IP address.
     The temporary IP address is needed for configuration purposes; it does not need to be identical to the final IP address. The temporary IP address must be within the IP address range of the configuration PC.
     Example:
     - PC IP = 192.168.100.001 / Subnetmask = 255.255.255.000
     - Print server IP = 192.168.100.002 / Subnetmask = 255.255.255.000
   - Select the WLAN communication mode.
     - Select 'Ad-Hoc', if you want to operate the print server 'Peer to Peer'.
     - Select 'Infrastructure' if you want to operate the print server within a network with an access point.
   - Enter the SSID.
     - If you operate the print server in the 'Ad-Hoc' mode, enter a freely definable name.
     - If you operate the print server in the 'Infrastructure' mode, enter the SSID of the access point.
   - Select a WLAN security mode and follow the instructions.
5. *Verify the settings and click 'Finish'.*
   The settings are saved and the print server is restarted.
6. *Adapt the WLAN settings of the PC to the new print server settings.*
7. *Choose the 'Find New' option in the 'Search' menu of the InterCon-NetTool to find the PS159.*
   If the PS159 is not listed, print a status page and verify the settings. In the event of incorrect parameters please reset the print server and repeat the installation. Refer to the User Manual if necessary.
8. *Start the software installation of the print server on the PC.*

Notification

The latest version of the EC declaration of conformity can be downloaded from the homepage of SEH Computertechnik GmbH:
http://www.seh-technology.com/services/ce-notification.html

Manufacturer's Name
SEH Computertechnik GmbH

Manufacturer's Address
Suedring 11
33647 Bielefeld
Germany
Phone ++49 (0) 521 - 94226-0

EC – Declaration of Conformity

Herewith SEH Computertechnik GmbH declares that

Product: **Built-In Printserver**

Type designation: **PS159**

Serial No.: 228 yyyy mm nnnnn (yyyy = year, mm = month, nnnnn = seq. no.)

is in conformity with the provisions of the
DIRECTIVE 2004/108/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF DEC. 15, 2004

Standards applied:

EN 55024:1998 +A1:2001 +A2:2003 and
EN 55022:2006 +A1:2007 Class B

To meet the above specifications, the user has to comply with all instructions defined in the enclosed manual *Hardware Installation Guide*.

Bielefeld, September 27, 2011

Dipl.-Ing. Rainer Ellerbrake, General Manager

EC - Class B

Federal Communication Commission (FCC) Notice

The user has to comply with all instructions defined in this manual. It is not allowed to do product modifications not expressly approved by SEH.

Note:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC - Class B

Manufactured by:
SEH Computertechnik GmbH
Suedring 11
33647 Bielefeld
Germany
Phone: +49 (0)521 94226-29
Fax: +49 (0)521 94226-99
Support: +49 (0)521 94226-44
Email: info@seh.de
Web: http://www.seh.de

Document:
Type: Hardware Installation Guide
Title: PS159
Version: 1.3
Order number: MHAB-EB-IV-PS159

Online Links to important Internet Resources:

Free Guarantee Extension: http://www.seh-technology.com/guarantee
Support Contacts and Information: http://www.seh-technology.com/support
Sales Contacts and Information: http://www.seh-technology.com/sales

Recycling notes according to the Electric and Electronic Equipment Act as well as the European directive 'WEEE'. Dispose of the device separately at the end of its life cycle. Do not dispose of the product together with your domestic waste. You can return the device free of charge to your local collection point.

The product documentation gives you valuable information about your product.
Keep the documentation for further reference during the life cycle of the product.